

Project Report On

School Management System

Submitted to

**JAYSHREE PERIWAL HIGH SCHOOL
3, CHITRAKOOT SCHEME
JAIPUR**

IN PARTIAL FULFILLMENT OF

THE REQUIREMENTS FOR

**ALL INDIA SENIOR SCHOOL
CERTIFICATE EXAMINATION 2021
OF
CENTRAL BOARD OF SECONDARY
EDUCATION**

SUBMITTED BY: YASHASHAWI BHARADWAJ

Acknowledgement

I would like to thank everyone who helped me to accomplish this project.

My sincere thanks to my *family members* and *respected teachers*, who have helped me with their valuable suggestions and support throughout the development of the project.

I am highly thankful to my project guide **Ms. Ranjeeta** for providing guidance and support at every stage of the project.

I am extremely grateful to **Mrs. Jayshree Periwal**, *Director* and **Mrs. Madhu Maini**, *Principal of JAYSHREE PERIWAL HIGH SCHOOL*, Jaipur, for providing us a very good computer lab, due to which this project became possible.

YASHASHAWI BHARADWAJ

CERTIFICATE OF ORIGINALITY

This is to certify that the Project Report entitled “School Management System” submitted to JAYSHREE PERIWAL HIGH SCHOOL in partial fulfilment of the requirement for all India Senior Certificate Examination (AISCE) 2021 of CBSE, is an original work carried out by YASHASHAWI BHARADWAJ under my guidance.

The matter embodied in this project is genuine work done by the students and has not been submitted of any course of study.

.....

Signature of The Guide

Date:.....

Name : Mr. S. Laxman Rao

(HOD – Computer)

JAYSHREE PERIWAL HIGH SCHOOL

Jaipur

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1. Objective & Scope of the Project

Objective

The main objective of the project is to computerize the processing of few tasks related to Administration of a School

This system helps the user to maintain the records of Teachers and Students.

This application is used by the School authorities to maintain details of Teachers and students.

Users can also edit, add and delete details of the Teacher and Students.

Users also get the function of comparing marks of students with the average marks through Graphical Representation.

Students can also find out the semester wise fees of each class.

Scope

This project is developed for a School

It can further be easily optimized for the use of other educational institutions

This project will help the school administration to easily organise and access data of teachers and students. It will also provide them student's marks comparison with the average marks in a Graphical Representation which will help them analyse each child's strength and weaknesses.

This will be a time efficient way for the school authorities to handle large amount of data digitally and make a "Paperless" workplace.

2. Problem Definition

The project “School Management System” shows a simple School Management procedure conducted therein.

The system should be developed to maintain the students’ and teachers’ records, marks records, etc.

Each detail must be filled properly and options must be provided.

A proper database should be maintained in the RDBMS and the front end to be developed using advanced GUI interfaces.

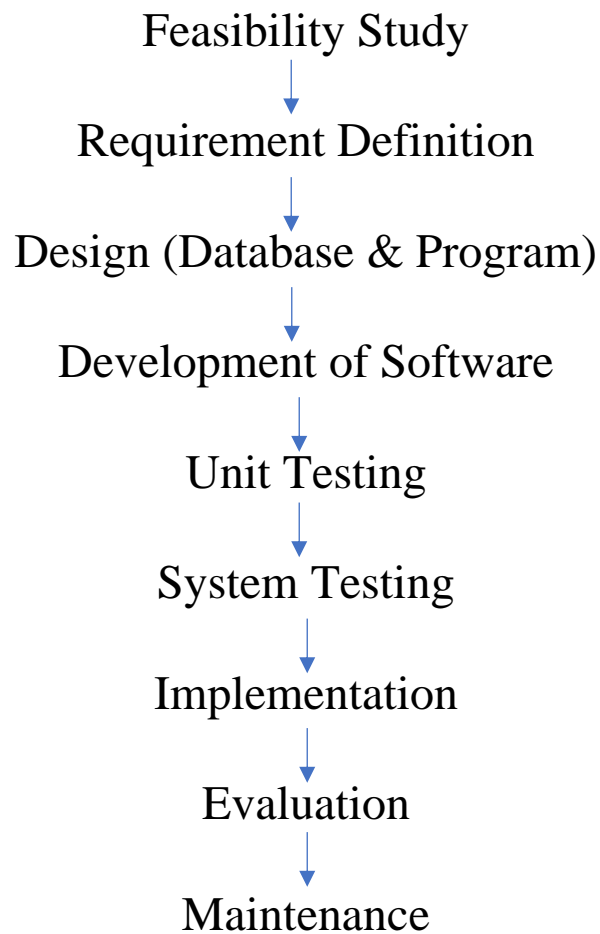
The system should be able to handle exceptional situations.

3. Life Cycle of Project

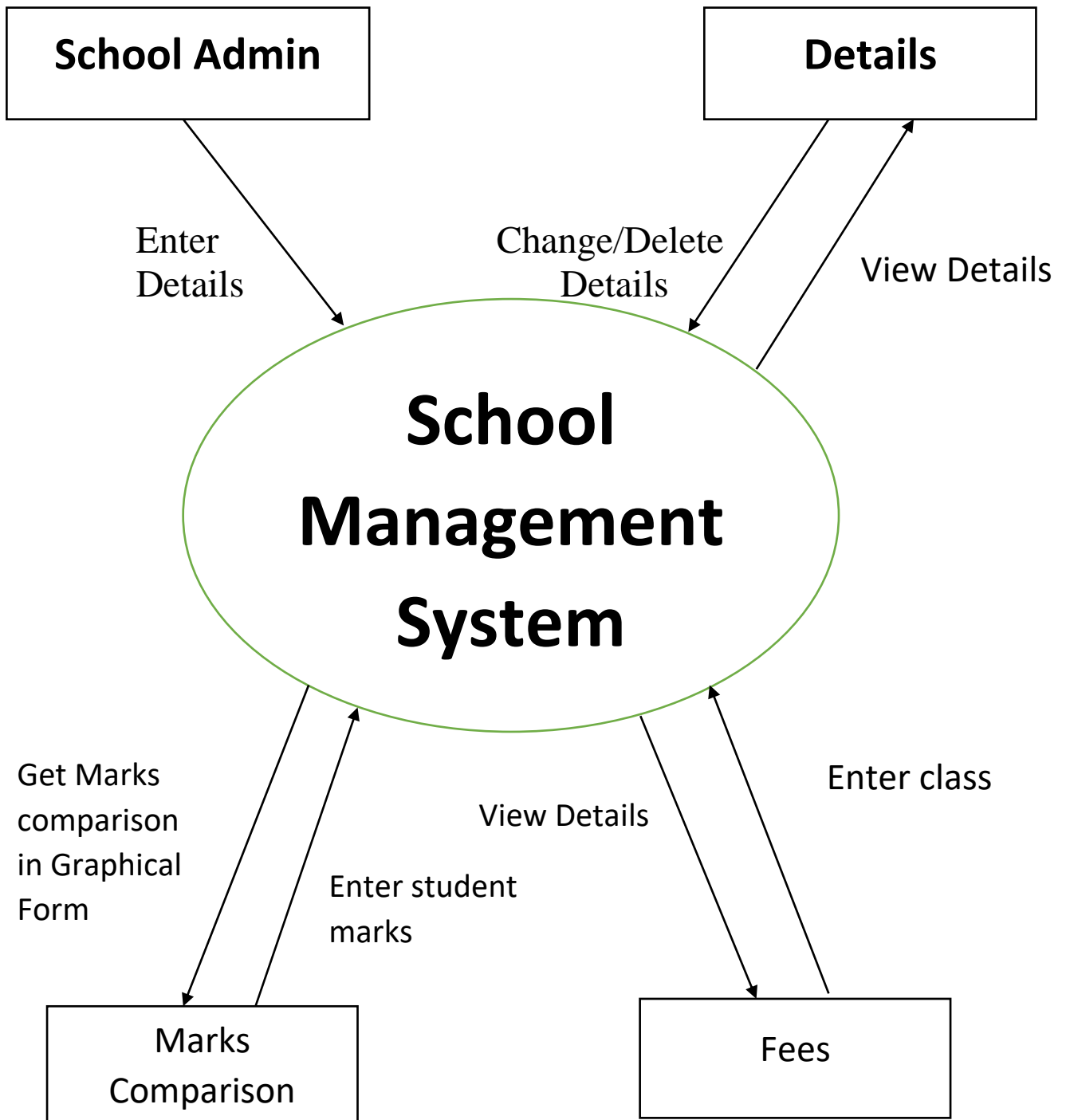
System Development Life Cycle (SDLC)

The System Development Life Cycle (SDLC) is a set of activities that analysts, designers and users carry out to develop and implement an Information System.

The SDLC consists of the following activities:



Context Diagram



4. Details of Hardware and Software used

Platform : Windows 10

Tools : IDLE (Python 3.8)

RDBMS : MySQL

Hardware Specifications

Microprocessor (CPU) : Intel Core i7

Memory (RAM) : 16 GB

Virtual Memory : 64-Bit

Hard Disk : 1 TB

VDU : SVGA

Keyboard : Standard 104 Keys

Mouse : Standard 2-Buttons Mouse
(Scroll)

Printer : Inkjet/Laser

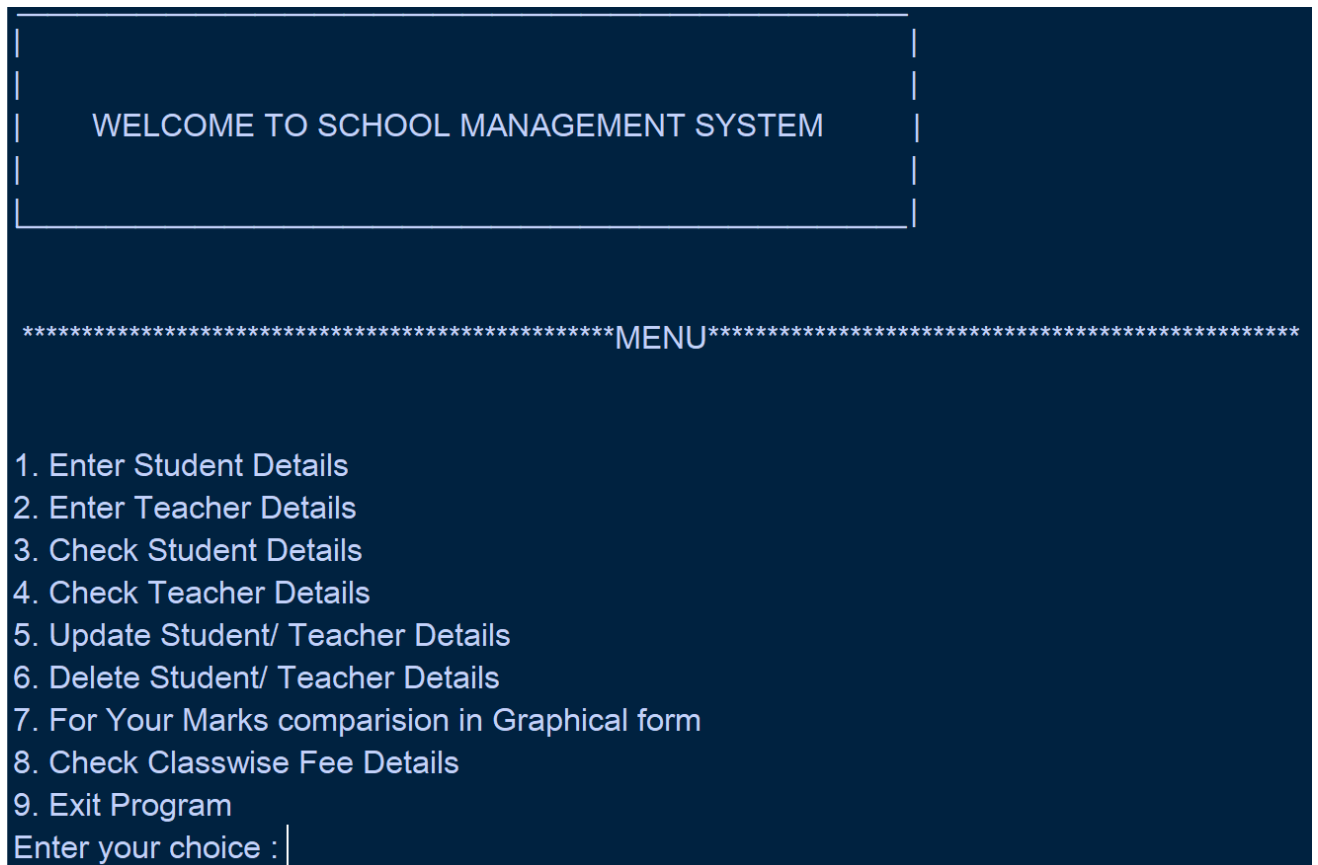
Software Specifications

Operating System	:	Windows 10
Front-End Design	:	IDLE (Python 3.8)
Back-End	:	MySQL
Documentation	:	Microsoft Word 2016 and MS Paint

5. Input Screen Designs

Input Forms

The **First Screen** of the project is as shown below:



There are **9 menu options available** in the main form and any one of them can be selected by entering their corresponding number.

First menu Option “Enter Student Details” is used to enter student details.

Screenshot of the Options of the First menu option:

Questions marked with * are optional to fill

Enter Your Name: Rajeev

Enter class in integer form (eg 10,12) : 9

Enter Your Gender*

1 for Male, 2 for Female, 3 for Other => 1

Enter your phone number *: 9876787654

Enter your address*: Jodhpur, Rajasthan

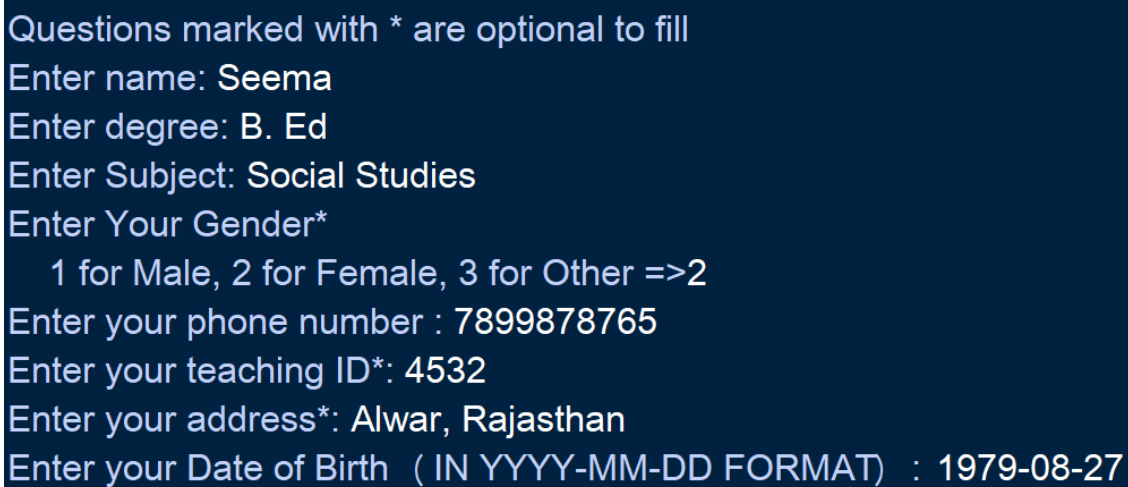
Enter your Date of Birth (IN YYYY-MM-DD FORMAT) *: 2007-05-14

The above screen is used to enter student details.

The details include Name, Class, Gender, Phone Number, Address and Date of Birth of the student.

Second menu Option “Enter Student Details” is used to enter student details.

Screenshot of the Options of the Second menu option:

A screenshot of a web form for entering student details. The form is displayed on a dark blue background with white text. It includes a header line stating that fields marked with an asterisk are optional. The form contains several input fields with their respective labels and values: 'Enter name: Seema', 'Enter degree: B. Ed', 'Enter Subject: Social Studies', 'Enter Your Gender*' with a note '1 for Male, 2 for Female, 3 for Other =>2', 'Enter your phone number : 7899878765', 'Enter your teaching ID*: 4532', 'Enter your address*: Alwar, Rajasthan', and 'Enter your Date of Birth (IN YYYY-MM-DD FORMAT) : 1979-08-27'.

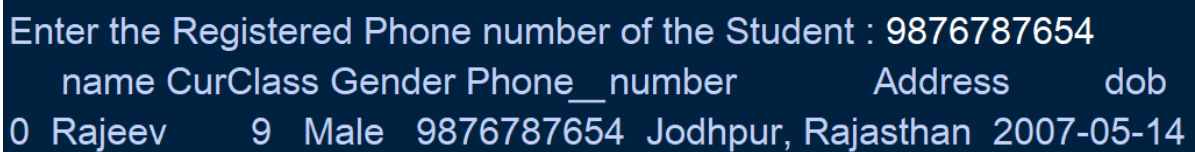
Questions marked with * are optional to fill
Enter name: Seema
Enter degree: B. Ed
Enter Subject: Social Studies
Enter Your Gender*
1 for Male, 2 for Female, 3 for Other =>2
Enter your phone number : 7899878765
Enter your teaching ID*: 4532
Enter your address*: Alwar, Rajasthan
Enter your Date of Birth (IN YYYY-MM-DD FORMAT) : 1979-08-27

The above screen is used to enter teacher details.

The details include Name, Degree, Subject, Gender, Phone Number, Teaching ID, Address and Date of Birth of the teacher.

Third menu Option “Check Student Details” is used to get the details of a particular student.

Screenshot of the Options of the Third menu option:



Enter the Registered Phone number of the Student : 9876787654

name	CurClass	Gender	Phone__number	Address	dob
0 Rajeev	9	Male	9876787654	Jodhpur, Rajasthan	2007-05-14

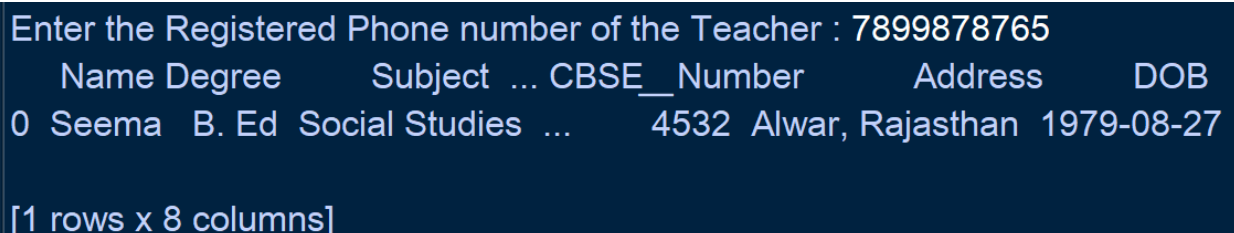
Firstly, the user will have to enter the registered mobile number of the student.

Then we get the details of the particular student as shown in the above screenshot.

The details include Name, Current Class, Gender, Phone number, Address and Date of Birth of the particular student.

Fourth menu Option “Check Teacher Details” is used to get the details of a particular teacher.

Screenshot of the Options of the Third menu option:



Enter the Registered Phone number of the Teacher : 7899878765

	Name	Degree	Subject	...	CBSE__Number	Address	DOB
0	Seema	B. Ed	Social Studies	...	4532	Alwar, Rajasthan	1979-08-27

[1 rows x 8 columns]

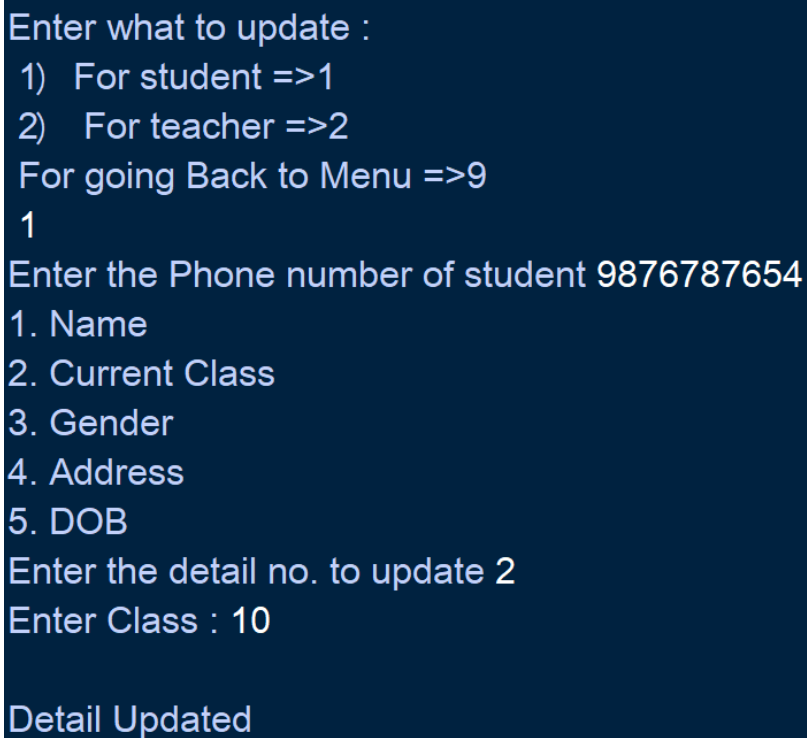
Firstly, the user will have to enter the registered mobile number of the teacher.

Then we get the details of the particular teacher as shown in the above screenshot.

The details include Name, Degree, Subject, Gender, Phone number, Teaching ID, Address and Date of Birth of the particular teacher.

Fifth menu Option “Update Student/Teacher Details” is used to get the details of a particular teacher.

Screenshot of the Options of the Third menu option:



```
Enter what to update :  
1) For student =>1  
2) For teacher =>2  
For going Back to Menu =>9  
1  
Enter the Phone number of student 9876787654  
1. Name  
2. Current Class  
3. Gender  
4. Address  
5. DOB  
Enter the detail no. to update 2  
Enter Class : 10  
  
Detail Updated
```

The first internal choice is whether the user has to update the details of a student or a teacher.

As shown in the screenshot above, the entered choice is 1 (i.e. Student)

Then the user will have to input the Registered Mobile number of the Student.

The user then gets options to choose what details they want to update.

In case of student the options are :-

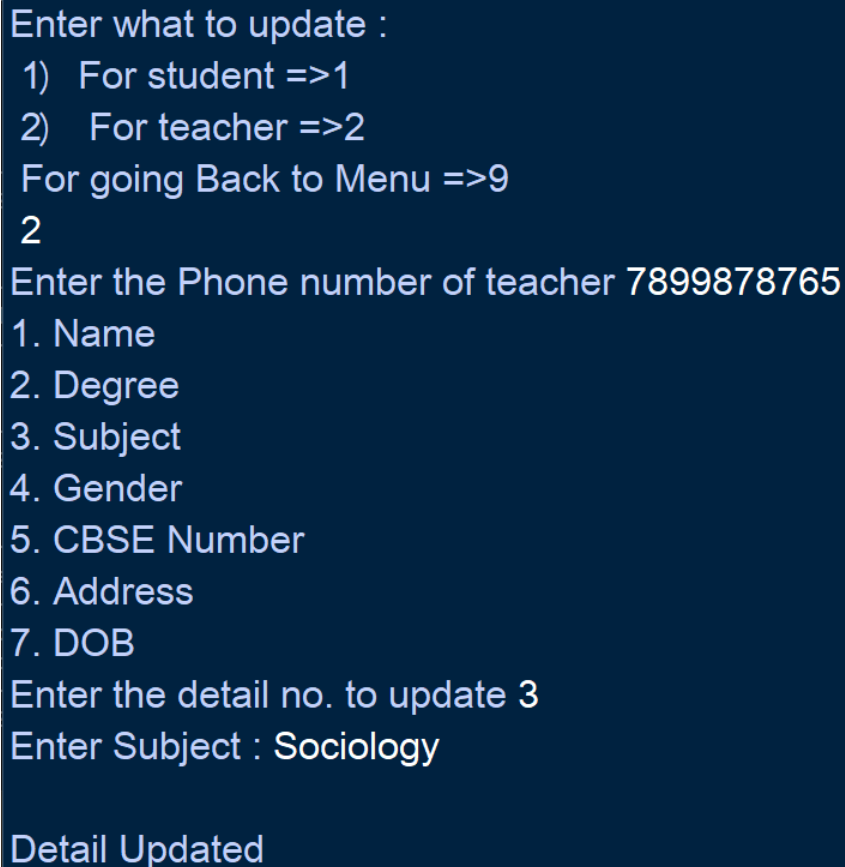
1. Name
2. Current Class
3. Gender
4. Address
5. DOB

After updating the details, we can see the updated information as shown in the screenshot below.

```
1. Enter Student Details
2. Enter Teacher Details
3. Check Student Details
4. Check Teacher Details
5. Update Student/ Teacher Details
6. Delete Student/ Teacher Details
7. For Your Marks comparision in Graphical form
8. Check Classwise Fee Details
9. Exit Program
Enter your choice : 3

Enter the Registered Phone number of the Student : 9876787654
    name CurClass Gender Phone__number      Address      dob
0 Rajeev    10  Male  9876787654 Jodhpur, Rajasthan 2007-05-14
```

As shown in the screenshot below, now we have entered the choice as 2 (i.e. Teacher)



```
Enter what to update :  
1) For student =>1  
2) For teacher =>2  
For going Back to Menu =>9  
2  
Enter the Phone number of teacher 7899878765  
1. Name  
2. Degree  
3. Subject  
4. Gender  
5. CBSE Number  
6. Address  
7. DOB  
Enter the detail no. to update 3  
Enter Subject : Sociology  
  
Detail Updated
```

Then the user will have to input the Registered Mobile number of the Teacher.

The user then gets options to choose what details they want to update.

In case of teacher the options are :-

- 1.Name
- 2.Degree
- 3.Subject
- 4.Gender
- 5.CBSE Number
- 6.Address
- 7.DOB

After updating the details, we can see the updated information as shown in the screenshot below.

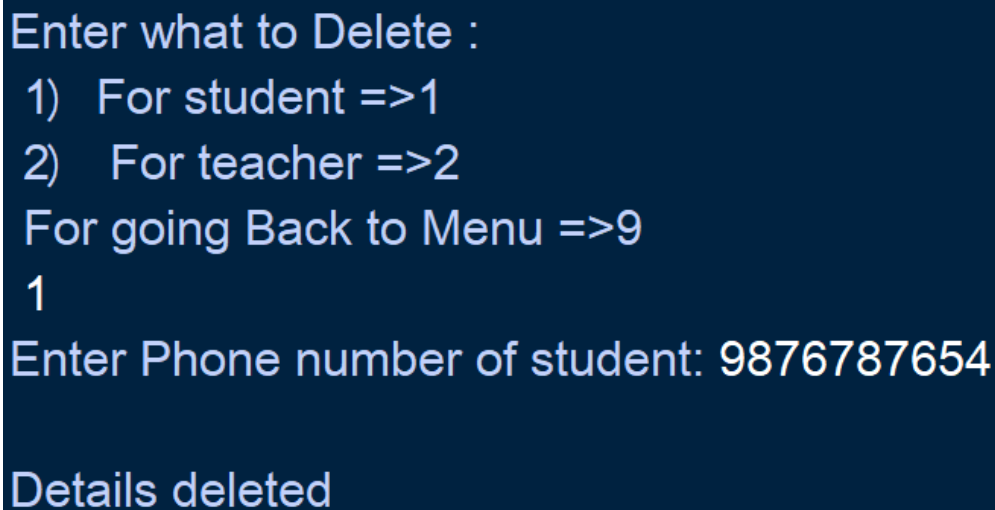
```
1. Enter Student Details
2. Enter Teacher Details
3. Check Student Details
4. Check Teacher Details
5. Update Student/ Teacher Details
6. Delete Student/ Teacher Details
7. For Your Marks comparision in Graphical form
8. Check Classwise Fee Details
9. Exit Program
Enter your choice : 4
```

```
Enter the Registered Phone number of the Teacher : 7899878765
```

```
   Name Degree   Subject ... CBSE__Number      Address      DOB
0 Seema  B. Ed  Sociology ...    4532 Alwar, Rajasthan 1979-08-27
```

Sixth menu Option “Delete Student/Teacher Details” is used to delete the details of a particular teacher.

Screenshot of the Options of the Third menu option:



The screenshot shows a terminal window with a dark blue background and light blue text. The text displays the following sequence of prompts and user input:

```
Enter what to Delete :  
1) For student =>1  
2) For teacher =>2  
For going Back to Menu =>9  
1  
Enter Phone number of student: 9876787654  
  
Details deleted
```

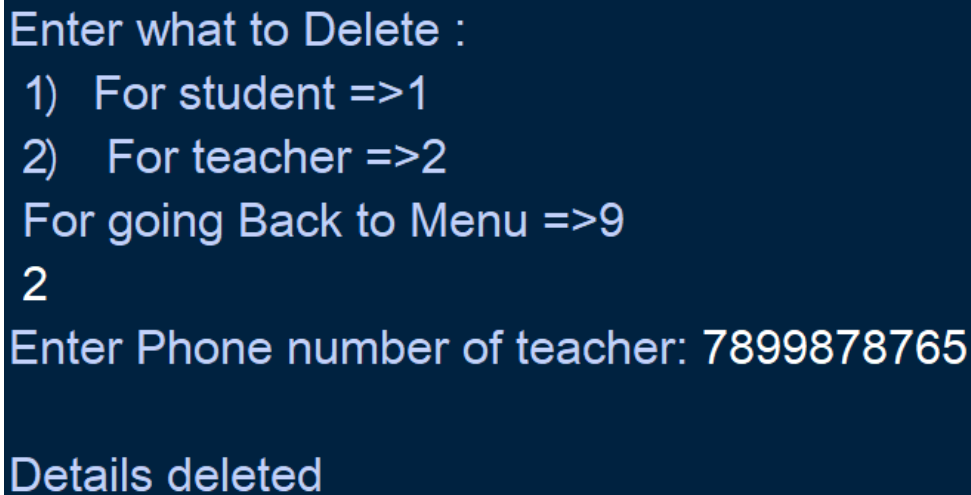
The first internal choice is whether the user has to update the details of a student or a teacher.

As shown in the screenshot above, the entered choice is 1 (i.e. Student)

Then the user will have to input the Registered Mobile number of the Student.

As soon as you enter the phone number the details of the particular student will get deleted.

As shown in the screenshot below, now we have entered the choice as 2 (i.e. Teacher)



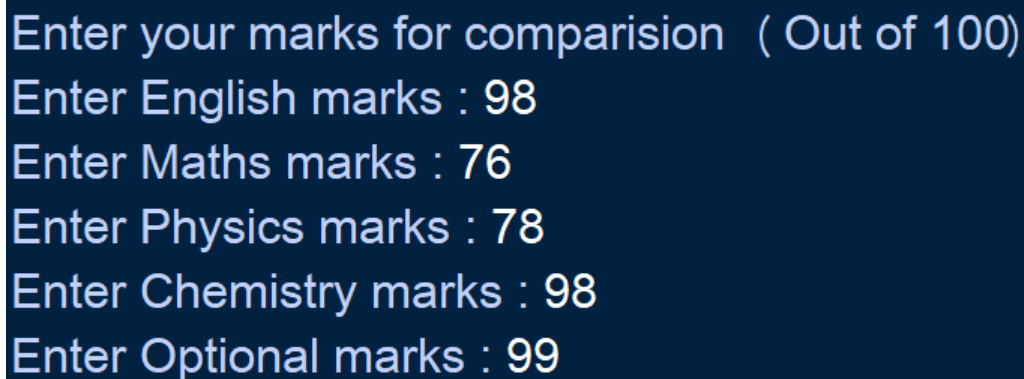
```
Enter what to Delete :  
1) For student =>1  
2) For teacher =>2  
For going Back to Menu =>9  
2  
Enter Phone number of teacher: 7899878765  
  
Details deleted
```

Then the user will have to input the Registered Mobile number of the teacher.

As soon as you enter the phone number the details of the particular teacher will get deleted.

Seventh menu Option “For your Marks comparison in Graphical form” is used to compare marks of a student with the average marks.

Screenshot of the Options of the Third menu option:

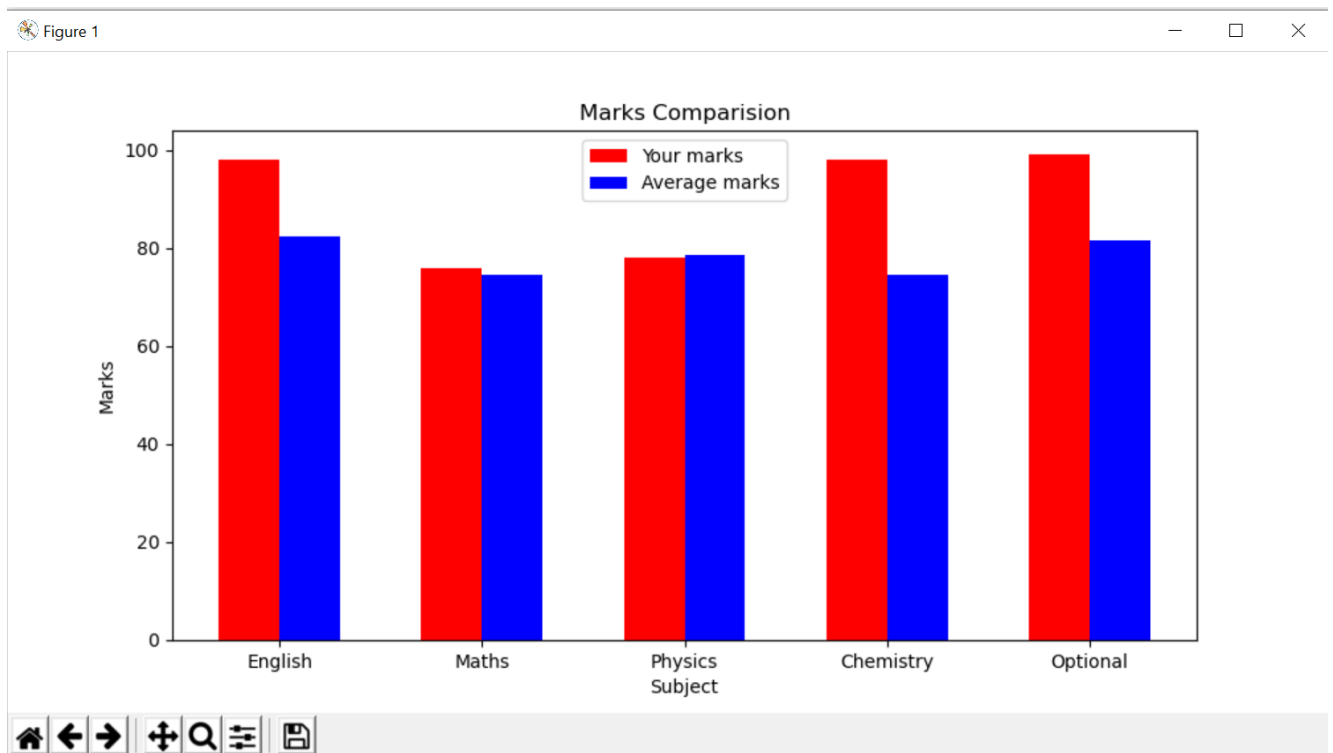
A screenshot of a dark blue rectangular box containing white text. The text is a form for entering marks for comparison, with the title 'Enter your marks for comparision (Out of 100)' and five input fields with their respective values: English marks : 98, Maths marks : 76, Physics marks : 78, Chemistry marks : 98, and Optional marks : 99.

Enter your marks for comparision (Out of 100)
Enter English marks : 98
Enter Maths marks : 76
Enter Physics marks : 78
Enter Chemistry marks : 98
Enter Optional marks : 99

First the user will have to enter student marks out of 100 as seen in the screenshot above.

As soon as the user enters the marks, a graphical comparison window pops up.

The screenshot of the graphical comparison is given below:



The red bars are the students marks

The blue bars are the average marks.

The x axis of the graph has all the subjects marked

The y axis of the graph has the marks up to 100 with an interval of 20 marks.

Eighth menu Option “Check Classwise Fee Details” is used get details of semester wise fee for students for their respective classes.

The screenshot of the eighth menu option is given below:

```
Enter the class for the fees ( eg 1,10 format) : 12
class Quarter1 quarter2 quarter3 quarter4 yearly
0 12 27890.0 27890.0 27890.0 27890.0 111560.0
```

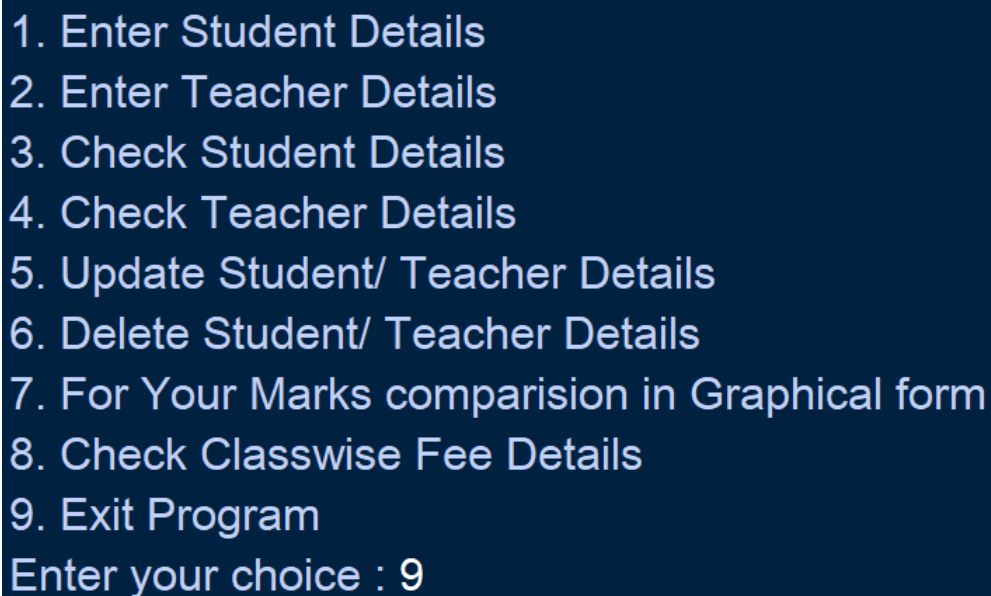
The user has entered the class as 12.

So, the user will get the fee details for class 12.

The user gets fee details of each quarter and also the total fee per annum.

Ninth menu Option “Exit Program” is used to exit the program.

The screenshot of the ninth menu option is given below:



```
1. Enter Student Details
2. Enter Teacher Details
3. Check Student Details
4. Check Teacher Details
5. Update Student/ Teacher Details
6. Delete Student/ Teacher Details
7. For Your Marks comparision in Graphical form
8. Check Classwise Fee Details
9. Exit Program
Enter your choice : 9
```

```
SystemExit:
Thanks For using this software
```

6. Source Code of the Project

Source code

❖ Modules Used

```
import pandas as pd
import random
import itertools
import numpy as np
import mysql.connector
from random import randint
import matplotlib.pyplot as plt
import sys

mydb =
mysql.connector.connect(host="localhost", user
="root",passwd ="12345678", database
="appdata")
mycursor=mydb.cursor()

#For conversion in 1D array
def oneDArray(x):
    return list(itertools.chain(*x))
```



Main menu (Front page)

WELCOME TO SCHOOL MANAGEMENT SYSTEM

*****MENU*****

1. Enter Student Details
 2. Enter Teacher Details
 3. Check Student Details
 4. Check Teacher Details
 5. Update Student/ Teacher Details
 6. Delete Student/ Teacher Details
 7. For Your Marks comparision in Graphical form
 8. Check Classwise Fee Details
 9. Exit Program
- Enter your choice : |

```
def menu():  
    print("\n\n  
*****  
*****MENU*****  
***** \n\n")  
    print("1. Enter Student Details ")  
    print("2. Enter Teacher Details ")  
    print("3. Check Student Details")
```



```
print("4. Check Teacher Details ")
print("5. Update Student/ Teacher Details ")
print("6. Delete Student/ Teacher Details ")
print("7. For Your Marks comparison in Graphical
form ")
print("8. Check Classwise Fee Details ")
print("9. Exit Program ")
inp=int(input("Enter your choice : "))
print("\n\n")
if inp==1:
    StudentData()
elif inp==2:
    teacherdata()
elif inp==3:
    studet()
elif inp==4:
    teadet()
elif inp==5:
    Updatedata()
elif inp==6:
    deldata()
elif inp==7:
    marks()
elif inp==8:
    fees()
elif inp==9:
    sys.exit("\nThanks For using this software")
else:
```

```
print("Please Enter a Valid number \n\n")
menu()
```

```
print("_____")
print("|
|")
print("|
|")
print("|      WELCOME TO SCHOOL MANAGEMENT
SYSTEM      |")
print("|
|")
print("|_____|")
menu()
```

a) Enter student details

```
Questions marked with * are optional to fill
Enter Your Name: Rajeev
Enter class in integer form ( eg 10,12) : 9
Enter Your Gender*
    1 for Male, 2 for Female, 3 for Other => 1
Enter your phone number *: 9876787654
Enter your address*: Jodhpur, Rajasthan
Enter your Date of Birth ( IN YYYY-MM-DD FORMAT) *: 2007-05-14
```

```
def StudentData():
    l=[]
    print("Questions marked with * are optional to fill")
    name=input("Enter Your Name: ")
    l.append(name)
    curclass=int(input("Enter class in integer form(eg
10,12): "))
    l.append(curclass)
    gender=int(input("Enter Your Gender*
1 for Male, 2 for Female, 3 for Other => "))
    if gender==1:
        gender="Male"
    elif gender==2:
        gender="Female"
    elif gender==3:
```

```
        gender="Other"
    l.append(gender)
    phone_number=int(input("Enter your phone number
*: "))
    l.append(phone_number)
    address=input("Enter your address*: ")
    l.append(address)
    dob=input("Enter your Date of Birth (IN YYYY-MM-DD
FORMAT)*: ")
    l.append(dob)
    stu=(l)
    sql="insert into
students(name,curclass,gender,phone_number,address,
dob)values(%s,%s,%s,%s,%s,%s)"
    mycursor.execute(sql,stu)
    mydb.commit()
    menu()
```

b) Enter Teacher Details

Questions marked with * are optional to fill
Enter name: Seema
Enter degree: B. Ed
Enter Subject: Social Studies
Enter Your Gender*
1 for Male, 2 for Female, 3 for Other =>2
Enter your phone number : 7899878765
Enter your teaching ID*: 4532
Enter your address*: Alwar, Rajasthan
Enter your Date of Birth (IN YYYY-MM-DD FORMAT) : 1979-08-27

```
def teacherdata():  
    k=[]  
    print("Questions marked with * are optional to fill")  
    name=input("Enter name: ")  
    k.append(name)  
    degree=input("Enter degree: ")  
    k.append(degree)  
    subject=input("Enter Subject: ")  
    k.append(subject)  
    gender=int(input("Enter Your Gender*  
1 for Male, 2 for Female, 3 for Other =>"))  
    if gender==1:  
        gender="Male"  
    elif gender==2:
```

```
        gender="Female"
    elif gender==3:
        gender="Other"
    k.append(gender)
    phone_number=int(input("Enter your phone number :
"))
    k.append(phone_number)
    CBSE_number=input("Enter your teaching ID*: ")
    k.append(CBSE_number)
    address=input("Enter your address*: ")
    k.append(address)
    dob=input("Enter your Date of Birth (IN YYYY-MM-DD
FORMAT): ")
    k.append(dob)
    teacher=(k)
    sql="insert into
teachers(name,degree,subject,gender,phone_number,CB
SE_number,address,dob)values(%s,%s,%s,%s,%s,%s,%s,%
s)"
    mycursor.execute(sql,teacher)
    mydb.commit()
    menu()
```

c) Check Student Details

```
Enter the Registered Phone number of the Student : 9876787654
name CurClass Gender Phone__number      Address      dob
0 Rajeev      9 Male 9876787654 Jodhpur, Rajasthan 2007-05-14
```

```
def studet():
    ph=input("Enter the Registered Phone number of the
Student : ")
    det=pd.read_sql("select * from students where
phone_number='%s';"%(ph),mydb)
    print(det)
    menu()
```

d) Check Teacher Details

Enter the Registered Phone number of the Teacher : 7899878765

	Name	Degree	Subject	...	CBSE__Number	Address	DOB
0	Seema	B. Ed	Social Studies	...	4532	Alwar, Rajasthan	1979-08-27

[1 rows x 8 columns]

```
def teadet():  
    ph=input("Enter the Registered Phone number of the  
Teacher : ")  
    det=pd.read_sql("select * from teachers where  
phone_number='%s';"%(ph),mydb)  
    print(det)  
    menu()
```


e) Update Student/ Teacher Details

```
Enter what to update :
1) For student =>1
2) For teacher =>2
For going Back to Menu =>9
1
Enter the Phone number of student 9876787654
1. Name
2. Current Class
3. Gender
4. Address
5. DOB
Enter the detail no. to update 2
Enter Class : 10

Detail Updated
```

```
def Updatedata():
    x=int(input("Enter what to update : \n 1)For student
=>1 \n 2) For teacher =>2 \n For going Back to Menu =>9
\n "))
    if x==1:
        n=input("Enter the Phone number of student ")
        print("1. Name")
        print("2. Current Class")
        print("3. Gender")
```

```
print("4. Address")
print("5. DOB")
y=int(input("Enter the detail no. to update "))
if y==1:
    s=input("Enter Name : ")
    sql="update students set name='%s' where
phone_number='%s';"%(s,n)
    mycursor.execute(sql)
    mydb.commit()
    print("\nDetail Updated")
elif y==2:
    s=input("Enter Class : ")
    sql="update students set Curclass='%s' where
phone_number='%s';"%(s,n)
    mycursor.execute(sql)
    mydb.commit()
    print("\nDetail Updated")
elif y==3:
    s=input("Enter Gender : ")
    sql="update students set Gender='%s' where
phone_number='%s';"%(s,n)
    mycursor.execute(sql)
    mydb.commit()
    print("\nDetail Updated")
elif y==4:
    s=input("Enter Address : ")
    sql="update students set address='%s' where
phone_number='%s';"%(s,n)
```

```
        mycursor.execute(sql)
        mydb.commit()
        print("\nDetail Updated")
    elif y==5:
        s=input("Enter DOB : ")
        sql="update students set DOB='%s' where
phone_number='%s';"%(s,n)
        mycursor.execute(sql)
        mydb.commit()
        print("\nDetail Updated")
    else:
        print("\nPlease enter a valid number")
        menu()
    menu()
elif x==2:
    n=input("Enter the Phone number of teacher ")
    print("1. Name")
    print("2. Degree")
    print("3. Subject")
    print("4. Gender")
    print("5. CBSE Number")
    print("6. Address")
    print("7. DOB")
    y=int(input("Enter the detail no. to update "))
    if y==1:
        s=input("Enter Name : ")
        sql="update teachers set name='%s' where
phone_number='%s';"%(s,n)
```

```
        mycursor.execute(sql)
        mydb.commit()
        print("\nDetail Updated")
    elif y==2:
        s=input("Enter Degree : ")
        sql="update teachers set degree='%s' where
phone_number='%s';"%(s,n)
        mycursor.execute(sql)
        mydb.commit()
        print("\nDetail Updated")
    elif y==3:
        s=input("Enter Subject : ")
        sql="update teachers set subject='%s' where
phone_number='%s';"%(s,n)
        mycursor.execute(sql)
        mydb.commit()
        print("\nDetail Updated")
    elif y==4:
        s=input("Enter Gender : ")
        sql="update teachers set Gender='%s' where
phone_number='%s';"%(s,n)
        mycursor.execute(sql)
        mydb.commit()
        print("\nDetail Updated")
    elif y==5:
        s=input("Enter CBSE Number : ")
        sql="update teachers set CBSE_Number='%s'
where phone_number='%s';"%(s,n)
```

```
        mycursor.execute(sql)
        mydb.commit()
        print("\nDetail Updated")
    elif y==6:
        s=input("Enter Address : ")
        sql="update teachers set address='%s' where
phone_number='%s';"%(s,n)
        mycursor.execute(sql)
        mydb.commit()
        print("\nDetail Updated")
    elif y==7:
        s=input("Enter DOB (YYYY-MM-DD): ")
        sql="update teachers set dob='%s' where
phone_number='%s';"%(s,n)
        mycursor.execute(sql)
        mydb.commit()
        print("\nDetail Updated")
    else:
        print("\nPlease enter a valid number")
        menu()
    menu()
elif x==9:
    menu()
else:
    menu()
```

f) Delete Student/ Teacher Details

```
Enter what to Delete :
1) For student =>1
2) For teacher =>2
For going Back to Menu =>9
1
Enter Phone number of student: 9876787654

Details deleted
```

```
def deldata():
    x=int(input("Enter what to Delete : \n 1)For student
=>1 \n 2) For teacher =>2 \n For going Back to Menu =>9
\n "))
    if x==1:
        d=int(input("Enter Phone number of student: "))
        qry="delete from students where
Phone_number='%s';"%(d)
        mycursor.execute(qry)
        mydb.commit()
        print("\nDetails deleted ")
        menu()
    elif x==2:
        d=int(input("Enter Phone number of teacher: "))
```

```
    qry="delete from teachers where  
Phone_number='%s';"%(d)  
    mycursor.execute(qry)  
    mydb.commit()  
    print("\nDetails deleted ")  
    menu()  
else:  
    print("\nPlease enter a valid number")  
    menu()
```

g) For Your Marks comparison in Graphical form

Enter your marks for comparison (Out of 100)

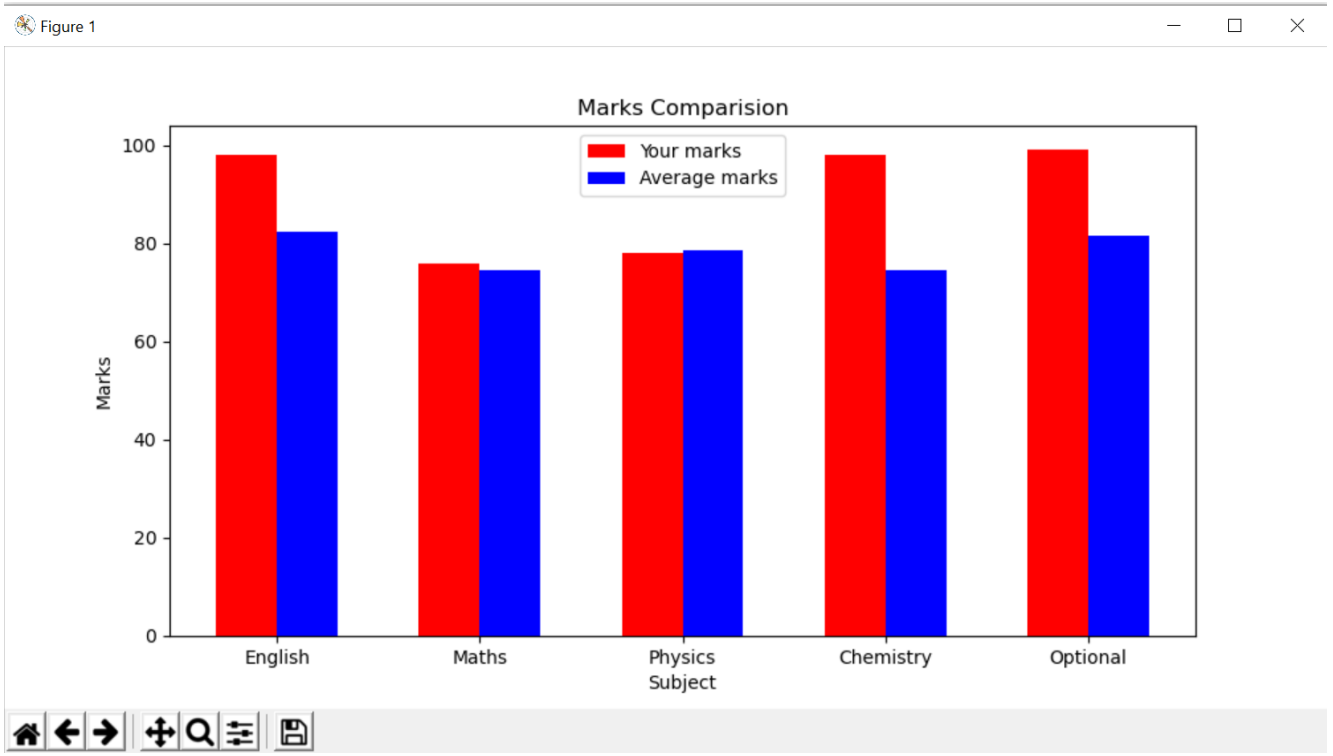
Enter English marks : 98

Enter Maths marks : 76

Enter Physics marks : 78

Enter Chemistry marks : 98

Enter Optional marks : 99




```
#For conversion in 1D array
```

```
def oneDArray(x):  
    return list(itertools.chain(*x))
```

```
# For pyplot
```

```
def plot(m,fin):  
    n=5
```

```
sub=("English","Maths","Physics","Chemistry","Optional"  
)
```

```
    y_pos=np.arange(len(sub))
```

```
    ind=np.arange(n)
```

```
    width=0.3
```

```
    plt.figure(figsize=(10,5))
```

```
    plt.bar(ind,m,width,color='r',label='Your marks')
```

```
    plt.bar(ind+width,fin,width,color='b',label='Average  
marks')
```

```
    plt.xlabel("Subject")
```

```
    plt.ylabel("Marks")
```

```
    plt.xticks(ind + width / 2, sub)
```

```
    plt.title("Marks Comparison")
```

```
    plt.legend()
```

```
    plt.show()
```

```
def marks():
    print("Enter your marks for comparison (Out of 100)")
    m=[]
    eng=int(input("Enter English marks : "))
    m.append(eng)
    math=int(input("Enter Maths marks : "))
    m.append(math)
    phy=int(input("Enter Physics marks : "))
    m.append(phy)
    chem=int(input("Enter Chemistry marks : "))
    m.append(chem)
    opt=int(input("Enter Optional marks : "))
    m.append(opt)
    marks=(m)
    sql="insert into
marks(english,maths,physics,chemistry,optional)values(%
s,%s,%s,%s,%s);"
    mycursor.execute(sql,marks)
    mydb.commit()
    avg=pd.read_sql("select
avg(english),avg(maths),avg(physics),avg(chemistry),avg(
optional)from marks;",mydb)
    ab=avg.values.tolist()    #gives nested list
    #For converting to 1D list
    fin=oneDArray(ab)
    grph=plot(marks,fin)
    menu()
```

h) Check Classwise Fee Details

```
Enter the class for the fees ( eg 1,10 format) : 12
class Quarter1 quarter2 quarter3 quarter4 yearly
0 12 27890.0 27890.0 27890.0 27890.0 111560.0
```

```
def fees():
    cl=int(input("Enter the class for the fees (eg 1,10
format): "))
    f=pd.read_sql("select class, Quarter1, quarter2,
quarter3, quarter4, yearly from fees where
class='%s';"%(cl),mydb)
    print (f)
    menu()
```

i) Exit Program

```
1. Enter Student Details
2. Enter Teacher Details
3. Check Student Details
4. Check Teacher Details
5. Update Student/ Teacher Details
6. Delete Student/ Teacher Details
7. For Your Marks comparision in Graphical form
8. Check Classwise Fee Details
9. Exit Program
Enter your choice : 9
```

```
SystemExit:
Thanks For using this software
```

```
sys.exit("\nThanks For using this software")
```

7. DATA DICTIONARY

Tables used in this project are:

1. Students

Field	Type	Null	Key	Default	Extra
name	varchar(60)	NO		NULL	
CurClass	varchar(2)	NO		NULL	
Gender	varchar(20)	YES		NULL	
Phone_number	varchar(13)	NO	PRI	NULL	
Address	varchar(100)	YES		NULL	
dob	varchar(12)	NO		NULL	

2. Teachers

Field	Type	Null	Key	Default	Extra
Name	varchar(60)	NO		NULL	
Degree	varchar(150)	NO		NULL	
Subject	varchar(50)	NO		NULL	
Gender	varchar(20)	YES		NULL	
Phone_number	varchar(13)	NO	PRI	NULL	
CBSE_Number	varchar(30)	YES		NULL	
Address	varchar(100)	YES		NULL	
DOB	varchar(12)	NO		NULL	

3. Marks

Field	Type	Null	Key	Default	Extra
Class	int	NO	PRI	NULL	
Quarter1	decimal(8,2)	YES		NULL	
Quarter2	decimal(8,2)	YES		NULL	
Quarter3	decimal(8,2)	YES		NULL	
Quarter4	decimal(8,2)	YES		NULL	
Yearly	decimal(10,2)	YES		NULL	

4.Fees

Field	Type	Null	Key	Default	Extra
Class	int	NO	PRI	NULL	
Quarter1	decimal(8,2)	YES		NULL	
Quarter2	decimal(8,2)	YES		NULL	
Quarter3	decimal(8,2)	YES		NULL	
Quarter4	decimal(8,2)	YES		NULL	
Yearly	decimal(10,2)	YES		NULL	